

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of processing transmission data to inhibit error propagation in a digital image data communication system, the method comprising:
- (a) inputting an image frame from an external source;
 - (b) checking for feedback error information including the location of an erroneous block on a first compressed image frame detected during decoding by a decoder, the feedback error information received via a communication network;
 - (c) if it is determined in step (b) that there is feedback error information, intracoding an erroneous block, the location of which is included in the feedback error information, and its search range, ~~which is referred to~~ said search range being defined by blocks referenced to encode the erroneous block using an intercoding method, among the image frame input in step (a), thereby constituting a second compressed image frame; and
 - (d) transmitting the compressed image frame constituted in step (c), via a communication network.
2. (original): The method of claim 1, wherein the error block location included in the feedback error information in step (b) is set in units of 16 (pixel)×16 (pixel) macro blocks.

3. (original): The method of claim 1, wherein the search range in step (c) includes 16 pixels or 32 pixels in four directions on the basis of the erroneous block.

4. (original): The method of claim 1, wherein the feedback error information in step (b) is associated with the image frame immediately preceding a current image frame.

a' 5. (currently amended): A method of processing transmission data to inhibit error propagation in a digital image data communication system, the method comprising:

(a) inputting an image frame from an external source;

(b) when the image frame input in step (a) is the first image frame in a specific sequence, encoding the entire image frame using an intracoding method, to constitute a compressed image frame;

(c) when the image frame input in step (a) is not the first image frame in a specific sequence, checking feedback error information including the location of an erroneous block on a compressed image frame detected during decoding by a decoder, the feedback error information received via a communication network;

(d) if it is determined in step (c) that there is feedback error information, intracoding an erroneous block, the location of which is included in the feedback error information, and its search range, ~~which is referred to~~ said search range being defined by blocks referenced to encode the erroneous block using an intercoding method, among the image frame input in step (a), while

the remaining area of the input image frame is encoded by intercoding, thereby constituting a compressed image frame, and if it is determined in step (c) that no feedback error information is received, intracoding block(s) selected by a predetermined method from among the blocks of the image frame input in step (a), and intercoding the remaining blocks, thereby constituting a compressed image frame; and

Q1 (e) transmitting the compressed image frame constituted in step (b) or (d), via a communication network.

6. (original): The method of claim 5, wherein the error block location included in the feedback error information in step (c) is set in units of 16 (pixel)×16 (pixel) macro blocks, and the search range in step (c) includes 16 pixels or 32 pixels in four directions on the basis of the erroneous block.

7. (currently amended) A method of processing received data to inhibit error propagation in a digital image data communication system, the method comprising:

- (a) receiving a first compressed image frame via a communication network;
- (b) decoding the first compressed image frame received in step (a) to constitute a first ~~an~~ image frame;

(c) if an error is detected at a specific block on the first compressed image frame received in step (a) during the decoding in the step (b), sending feed back error information including an error block location back to an encoder via a communication network; ~~and~~

(d) outputting ~~an~~ the first image frame restored in step (b);

a' (e) receiving a second compressed image frame in which an error detected block and a search range of the error-detected block have been encoded by intracoding in response to the feedback error information sent in step (c), from the encoder via the communication network;

(f) decoding the second compressed image frame received in step (e) referring to the error detected block and the search range of the error detected block, to constitute a second image frame; and

(g) outputting the second image frame restored in step (f).

8. (Original) The method of claim 7, wherein the error block location included in the feedback error information in step (c) is set in units of 16(pixel)x16(pixel) macro blocks.

9. (currently amended): A computer-readable recording medium for recording a program which is executed in a computer for processing transmission data to inhibit error propagation in a digital image data communication system, the program comprising the steps of:

(a) inputting an image frame from an external source;

(b) checking feedback error information including the location of an erroneous block on a first compressed image frame detected during decoding by a decoder, the feedback error information received via a communication network;

(c) if it is determined in step (b) that there is feedback error information, intracoding an erroneous block, the location of which is included in the feedback error information, and its search range, ~~which is referred to~~ said search range being defined by blocks referenced to encode the erroneous block using an intercoding method, among the image frame input in step (a), thereby constituting a second compressed image frame; and

(d) transmitting the compressed image frame constituted in step (c), via a communication network.

10. (currently amended): A computer-readable recording medium for recording a program which is executed in a computer for processing transmission data to inhibit error propagation in a bidirectional digital image data communication system, the program comprising the steps of:

(a) inputting an image frame from an external source;

(b) when the image frame input in step (a) is the first image frame in a specific sequence, encoding the entire image frame using an intracoding method, to constitute a first compressed image frame;

(c) when the image frame input in step (a) is not the first image frame in a specific sequence, checking feedback error information including the location of an erroneous block on a second compressed image frame detected during decoding by a decoder, the feedback error information received via a communication network;

(d) if it is determined in step (c) that there is feedback error information, intracoding an erroneous block, the location of which is included in the feedback error information, and its search range, ~~which is referred to~~ said search range being defined by blocks referenced to encode the erroneous block using an intercoding method, among the image frame input in step (a), while the remaining area of the input image frame is encoded by intercoding, thereby constituting a third compressed image frame, and if it is determined in step (c) that no feedback error information is received, intracoding block(s) selected by a predetermined method among the blocks of the image frame input in step (a), and intercoding the remaining blocks, thereby constituting a fourth compressed image frame; and

(e) transmitting the compressed image frame constituted in step (b) or (d), via a communication network.

11. (Currently Amended) A computer-readable recording medium for recording a program which is executed in a computer for processing received data to inhibit error propagation in a digital image data communication system, the program comprising the steps of:

(a) receiving a first compressed image frame via a communication network;

(b) decoding the first compressed image frame received in step (a) to constitute ~~an~~ a first image frame;

(c) if an error is detected at a specific block on the first compressed image frame received in step (a) during the decoding in the step (b), sending feedback error information including an error block location back to an encoder via a communication network; ~~and~~

(d) outputting ~~an~~ the first image frame restored in step (b);

Q, (e) receiving a second compressed image frame in which an error-detected block and a search range of the error-detected block have been encoded by intracoding in response to the feedback error information sent in step (c), from the encoder via the communication network;

(f) decoding the second compressed image frame received in step (e) referring to the error detected block and the search range of the error detected block, to constitute a second image frame; and

(g) outputting the second image frame restored in step (f).
